

Amendment to Claims

This listing of Claims will replace all prior versions and listings of claims in this Application.

Listing of Claims

Claim 1. (CURRENTLY AMENDED) A vector error diffusion (VED) method employable in cycles with respect to a bi-tonal color printing engine which prints bi-tonal color images in a device output color space, said method, with respect to each cycle, comprising

acquiring input color-image data which is characterized with an input color space,

processing, with available pre-established VED accumulated error data, such input data to produce a VED-processed input color-image data stream,

from such VED-processed input color-image data stream, and utilizing a color-value data/palette containing color values based upon device output-color-space-determined values for the primary and secondary colors which the printing engine is capable of printing,

creating, without employing interpolation, a VED-processed output color-image data stream which is characterized by the mentioned device output color space, and which is suitable for delivery to and use by the mentioned printing engine, said creating including employing, in the mentioned color-value data/palette, additional, fictional color values based upon device output-color-space-selected values for arbitrary C', M' and Y' colors which lie at vector distances that are intermediate the primary C, M and Y colors and white, and

changing, as appropriate for the next cycle, the VED accumulated error data which will be employed in that next cycle as pre-established VED accumulated error data.

Claim 2. (ORIGINAL) The method of claim 1, which further comprises, at the conclusion of each cycle, delivering the associated output color-image data stream to the printing engine.

Claim 3. (ORIGINAL) The method of claim 1, wherein the input, and the device output, color spaces are different.

Claim 4. (ORIGINAL) The method of claim 3, wherein the input color space is L,a,b color space, and the device output color space employed is C,M,Y color space.

Claim 5. (ORIGINAL) The method of claim 1, wherein said creating further includes utilizing a threshold luminosity value on one side of which all associated pixels are declared to be white, and on the other side of which, all pixels are declared to have a color which is other than white.

Claims 6 and 7. CANCELED WITHOUT PREJUDICE

Claim 8. (CURRENTLY AMENDED) The method of claim 5 [4], wherein said creating further includes ~~employing a color-value data palette containing color values based upon device output-color-space-determined values for the primary and secondary colors which the printing engine is capable of printing, the step of creating includes~~ employing, in addition to luminance-value thresholding to declare certain colors to be white, a color data palette which contains solely a set of device output-color-space pixel values based upon spectrophotometric evaluated actual output print

engine performance, coupled with three fictional device output color space values which lie intermediate the primary device output-color-space values and white.

Claims 9 - 11, inclusive. CANCELED WITHOUT PREJUDICE